

IN THE CLAIMS

Claims 1-73 (cancelled)

74. (currently amended) A method of processing broadcast content, data received via a broadcast, said content data including content attributes, said method comprising:

storing output attributes of an output device;

receiving digital broadcast signals;

decoding the digital broadcast signals into AV data that includes visual and audio information and into supplementary data that includes content data having content attributes;

obtaining at least one a style sheet based on attributes selected from at least one of the group consisting of said the output attributes and said the content attributes, said the style sheet including output format information; and

processing said the content data using said the style sheet for output via an by the output device.

75. (currently amended) The method of claim 74, wherein said the content data is written in a computer language format that includes arbitrarily definable tags.

76. (currently amended) The method of claim 75, wherein said the computer language format includes extended markup language (XML) tags.

77. (currently amended) The method of claim 74, wherein said the content data includes data selected from the group consisting of text data, still picture data, animation data, and voice data.

78. (currently amended) The method of claim 74, wherein said the style sheets includes scripts that define said the output format information as a function of said the output attributes.

79. (currently amended) The method of claim 74, wherein ~~said the~~ output attributes are selected from the group consisting of an output device display type, an output device resolution, an output device manufacturer's name, and an output device model name.

80. (currently amended) The method of claim 74, wherein said step of obtaining ~~at least onea~~ style sheet includes obtaining a plurality of style sheets, and selecting at least one of ~~said the~~ plurality of style sheets based on ~~said at least one of said output attributes and said content the~~ selected attributes.

81. (currently amended) The method of claim 74, wherein said step of obtaining ~~at least onea~~ style sheet includes obtaining ~~said at least one the~~ style sheet via a from the digital broadcast signals.

82. (currently amended) The method of claim 74, wherein said step of obtaining ~~at least onea~~ style sheet includes obtaining ~~said at least one the~~ style sheet from a remotely located server via a network.

83. (currently amended) The method of claim 74, wherein said step of obtaining ~~at least onea~~ style sheet includes obtaining ~~said at least one the~~ style sheet via from a portable recording medium.

84. (currently amended) A method of providing style sheets over a network, ~~said method comprising:~~

storing a plurality of style sheets at a server, each of ~~said the~~ plurality of style sheets including output format information as a function of at least one output attribute of an output device;

receiving, at the server, a request for at least one of said the plurality of style sheets, said the request being sent from a remotely located device via a network and including information selected from the group consisting of a file name,

at least one output attribute, and at least one content attribute;

selecting, at the server, ~~said-the~~ at least one of ~~said-the~~ plurality of style sheets as a function of ~~the~~ ~~said~~ information of ~~the~~ ~~said~~-request; and

transmitting ~~said-the~~ at least one of ~~said-the~~ plurality of style sheets ~~from the server to the device~~ over ~~said-the~~ network.

85. (currently amended) The method of claim 84, wherein each of ~~said-the~~ plurality of style sheets includes scripts that define ~~said-the~~ output format information as a function of ~~said-the~~ output attributes.

86. (currently amended) The method of claim 84, wherein ~~said-the~~ output attributes are selected from the group consisting of an output device display type, an output device resolution, an output device manufacturer's name, and an output device model name.

87. (currently amended) A method of delivering broadcast content data, ~~said method~~ comprising:

transmitting digital broadcast signals from a transmitting device to a receiving station, the digital broadcast signals including AV data that includes visual and audio information and including supplementary data that includes broadcasting content data, ~~said content data including~~ having content attributes;

~~receiving said content data;~~

storing output attributes of an output device ~~at the receiving station;~~

decoding the received digital broadcast signals into the visual and audio information and into the content data;

obtaining, at the receiving station, ~~at least one a~~ style sheet based on attributes selected from ~~at least one of~~ the group consisting of ~~said-the~~ output attributes and ~~said-the~~

content attributes, ~~said the~~ style sheet including output format information; and

processing ~~said the~~ content data using ~~said the~~ style sheet for output ~~via an~~ by the output device.

88. (currently amended) A method of processing broadcast content, data received via a broadcast, said content data including content attributes, said method comprising:

storing, at a receiving station, output attributes of an output device;

receiving digital broadcast signals at the receiving station;

decoding the received digital broadcast signals into AV data that includes visual and audio information and into supplementary data that includes content data having content attributes;

storing a plurality of style sheets at a server, each of said the plurality of style sheets including output format information as a function of at least one output attribute of an output device;

transmitting a request from the receiving station to the server over a network for at least one of said the plurality of style sheets, said the request including information selected from the group consisting of a file name, at least one output attribute, and at least one content attribute;

~~receiving said request for said at least one of said plurality of style sheets;~~

selecting, at the server, said the at least one of said the plurality of style sheets as a function of said the information of said the request;

transmitting said the at least one of said the plurality of style sheets from the server to the receiving station over said the network; and

processing, at the receiving station, ~~said-the~~ content data using ~~said-the~~ style sheet for output via ~~an~~ by the output device.

89. (currently amended) An apparatus for processing broadcast content, ~~data received via a broadcast, said content data including content attributes, said apparatus~~ comprising:

a holding section operable to store output attributes of an output device;

a receiver operable to receive digital broadcast signals;

a decoder operable to decode the digital broadcast signals into AV data that includes visual and audio information and into supplementary data that includes content data having content attributes;

a selecting section operable to obtain ~~at least one~~ a style sheet based on attributes selected from ~~at least one of~~ the group consisting of ~~said-the~~ output attributes and said-the content attributes, ~~said-the~~ style sheet including output format information; and

a processor operable to process ~~said-the~~ content data using ~~said-the~~ style sheet for output ~~via an~~ by the output device.

90. (currently amended) The apparatus of claim 89, wherein ~~said-the~~ content data is written in a computer language format that includes arbitrarily definable tags.

91. (currently amended) The apparatus of claim 90, wherein ~~said-the~~ computer language format includes extended markup language (XML) tags.

92. (currently amended) The apparatus of claim 89, wherein ~~said-the~~ content data includes data selected from the group consisting of text data, still picture data, animation data, and voice data.

93. (currently amended) The apparatus of claim 89, wherein ~~said the~~ style sheets includes scripts that define ~~said the~~ output format information as a function of ~~said the~~ output attributes.

94. (currently amended) The apparatus of claim 89, wherein ~~said the~~ output attributes are selected from the group consisting of an output device display type, an output device resolution, an output device manufacturer's name, and an output device model name.

95. (currently amended) The apparatus of claim ~~9089~~, wherein said selecting section is operable to obtain a plurality of style sheets, and to select at least one of ~~said the plurality of style sheets based on said at least one of said output attributes and said content~~ the selected attributes.

96. (currently amended) The apparatus of claim ~~9089~~, wherein said selecting section is operable to obtain ~~said at least one the style sheet via a~~ from the digital broadcast signals.

97. (currently amended) The apparatus of claim ~~9089~~, wherein ~~said selecting~~ section is operable to obtain ~~said at least one the style sheet~~ from a remotely located server via a network.

98. (currently amended) The apparatus of claim ~~9089~~, wherein ~~said selection~~ selecting section is operable to obtain ~~said at least one the style sheet via~~ from a portable recording medium.

99. (currently amended) A style sheet server for providing style sheets over a network, ~~said style sheet server~~ comprising:

a storage section operable to store a plurality of style sheets, each of ~~said the~~ plurality of style sheets including output format information as a function of at least one output attribute of an output device;

a receiving section operable to receive a request for at least one of ~~said the~~ plurality of style sheets, ~~said the~~ request being sent from a remotely located device via the network and including information selected from the group consisting of a file name, at least one output attribute, and at least one content attribute;

a selecting means ~~for~~ section operable to selecting ~~said the~~ at least one of ~~said the~~ plurality of style sheets as a function of ~~said the~~ information of ~~said the~~ request; and

a transmitting section operable to transmit ~~said the~~ at least one of ~~said the~~ plurality of style sheets to the device over said the network.

100. (currently amended) The server of claim 99, wherein ~~said the~~ plurality of style sheets each include scripts that define ~~said the~~ output format information as a function of ~~said the~~ output attributes.

101. (currently amended) The server of claim 99, wherein ~~said the~~ output attributes are selected from the group consisting of an output device display type, an output device resolution, an output device manufacturer's name, and an output device model name.

102. (currently amended) A system for delivering broadcast content, data, ~~said system~~ comprising:

a broadcast station; and

a receiving station;

said broadcast station including a transmitter operable to transmit digital broadcast signals, the digital broadcast signals including AV data that includes visual and audio information and including supplementary data that includes broadcast content data, said content data including having content attributes;

said receiving station including:

a receiver operable to receive the digital broadcast signals ;

a decoder operable to decode the digital broadcast signals into the visual and audio information and into the content data ~~said content data,~~;

a holding section operable to store output attributes of an output device~~;~~;

a selecting section operable to obtain ~~at least one~~ a style sheet based on attributes selected from ~~at least one of~~ the group consisting of ~~said the~~ output attributes and ~~said the~~ content attributes, ~~said the~~ style sheet including output format information~~;~~ and

a processor operable to process ~~said the~~ content data using ~~said the~~ style sheet for output ~~via an~~ by the output device.

103. (currently amended) A system for processing broadcast content, ~~data received via a broadcast, said content data including content attributes, said system comprising:~~

a receiving station; and

a style sheet server;

said receiving station including:

a receiver operable to receive digital broadcast signals;

a decoder operable to decode the digital broadcast signals into AV data that includes visual and audio information and into supplementary data that includes content data having content attributes;

a holding section operable to receive and store output attributes of an output device~~;~~ and

a selecting section operable to transmit a request over a network to said style sheet server for at least one of a plurality of style sheets, ~~said the~~ request including information selected from the group consisting of a file name,

at least one output attribute, and at least one content attribute;

~~said style sheet server being operable to~~including:

a storage section operable to store ~~said the~~ plurality of style sheets, each of ~~said the~~ plurality of style sheets including output format information as a function of at least one output attribute of an output device₇;

a receiving section operable to receive ~~said the~~ request for ~~said the~~ at least one of ~~said the~~ plurality of style sheets₇;

a selecting section operable to select ~~said the~~ at least one of ~~said the~~ plurality of style sheets as a function of ~~said the~~ information of ~~said the~~ request₇; and

a transmitting section operable to transmit ~~said the~~ at least one of ~~said the~~ plurality of style sheets over ~~said the~~ network to ~~said selecting section of said~~ receiving section;

said receiving section further including:

a processor operable to process ~~said the~~ content data using ~~said the~~ at least one use of ~~said the~~ plurality of style sheets for output ~~via an~~ by the output device.

104. (currently amended) A recordable medium recorded with instructions for carrying out a method of processing broadcast content, ~~data received via a broadcast,~~ ~~said content data including content attributes,~~ ~~said instructions method comprising:~~

storing output attributes of an output device;

receiving digital broadcast signals;

decoding the digital broadcast signals into AV data that includes visual and audio information and into supplementary data that includes content data having content attributes;

obtaining ~~at least one~~ a style sheet based on attributes selected from ~~at least one of the~~ group consisting of

~~said the~~ output attributes and ~~said the~~ content attributes, ~~said the~~ style sheet including output format information; and

processing ~~said the~~ content data using ~~said the~~ style sheet for output ~~via an~~ by the output device.

105. (currently amended) The recordable medium of claim 104, wherein ~~said the~~ content data is written in a computer language format that includes arbitrarily definable tags.

106. (currently amended) The recordable medium of claim 105, wherein ~~said the~~ computer language format includes extended markup language (XML) tags.

107. (currently amended) The recordable medium of claim 104, wherein ~~said the~~ content data includes data selected from the group consisting of text data, still picture data, animation data, and voice data.

108. (currently amended) The recordable medium of claim 104, wherein ~~said the~~ style sheets includes scripts that define ~~said the~~ output format information as a function of ~~said the~~ output attributes.

109. (currently amended) The recordable medium of claim 104, wherein ~~said the~~ output attributes are selected from the group consisting of an output device display type, an output device resolution, an output device manufacturer's name, and an output device model name.

110. (currently amended) The recordable medium of claim 104, wherein said step of obtaining ~~at least one a~~ style sheet includes obtaining a plurality of style sheets, and selecting at least one of ~~said the~~ plurality of style sheets based on ~~said at least one of said output attributes and said content~~ the selected attributes.

111. (currently amended) The recordable medium of claim 104, wherein said step of obtaining ~~at least one a~~ style

sheet includes obtaining ~~said at least one the~~ style sheet via afrom the digital broadcast signals.

112. (currently amended) The recordable medium of claim ~~106~~104, wherein said step of obtaining ~~at least one a~~ style sheet includes obtaining ~~said at least one the~~ style sheet from a remotely located server via a network.

113. (currently amended) The recordable medium of claim ~~106~~104, wherein said step of obtaining ~~at least one a~~ style sheet includes obtaining ~~said at least one the~~ style sheet via from a portable recording medium.

114. (currently amended) A recordable medium recorded with instructions for carrying out a method of providing style sheets over a network, said ~~instructions method~~ comprising:

storing a plurality of style sheets at a server, each of ~~said the~~ plurality of style sheets including output format information as a function of at least one output attribute of an output device;

receiving, at the server, a request for at least one of ~~said the~~ plurality of style sheets, ~~said the~~ request being sent from a remotely located device via a network and including information selected from the group consisting of a file name, at least one output attribute, and at least one content attribute;

selecting, at the server, ~~said the~~ at least one of ~~said the~~ plurality of style sheets as a function of ~~said the~~ information of ~~said the~~ request; and

transmitting ~~said the~~ at least one of ~~said the~~ plurality of style sheets from the server to the device over ~~said the~~ network.

115. (currently amended) The recordable medium of claim 114, wherein each of ~~said the~~ plurality of style sheets

includes scripts that define ~~said the~~ output format information as a function of ~~said the~~ output attributes.

116. (currently amended) The recordable medium of claim 114, wherein ~~said the~~ output attributes are selected from the group consisting of an output device display type, an output device resolution, an output device manufacturer's name, and an output device model name.

117. (currently amended) A recordable medium recorded with instructions for carrying out a method of delivering broadcast content ~~data~~, ~~said instructions method~~ comprising:

transmitting digital broadcast signals from a transmitting device to a receiving station, the digital broadcast signals including AV data that includes visual and audio information and supplementary data that includes broadcasting content data, ~~said content data including having~~ content attributes;

~~receiving said content data;~~

storing output attributes of an output device at the receiving station;

decoding the received digital broadcast signals into the visual and audio information and into the content data;

obtaining, at the receiving station, ~~at least one a~~ style sheet based on attributes selected from ~~at least one of~~ the group consisting of ~~said the~~ output attributes and ~~said the~~ content attributes, ~~said the~~ style sheet including output format information; and

processing ~~said the~~ content data using ~~said the~~ style sheet for output ~~via any~~ the output device.

118. (currently amended) A recordable medium recorded with instructions for carrying out a method of processing broadcast content, ~~data received via a broadcast~~,

~~said content data including content attributes, said instructions~~
method comprising:

storing, at a receiving station, output attributes of an output device;

receiving digital broadcast signals at the receiving station;

decoding the received digital broadcast signals into AV data that includes visual and audio information and into supplementary data that includes content data having content attributes;

storing a plurality of style sheets at a server, each of ~~said the~~ plurality of style sheets including output format information as a function of at least one output attribute of an output device;

transmitting a request from the receiving station to the server over a network for at least one of ~~said the~~ plurality of style sheets, ~~said the~~ request including information selected from the group consisting of a file name, at least one output attribute, and at least one content attribute;

~~receiving said request for said at least one of said plurality of style sheets;~~

selecting, at the server, ~~said the~~ at least one of ~~said the~~ plurality of style sheets as a function of ~~said the~~ information of ~~said the~~ request;

transmitting ~~said the~~ at least one of ~~said the~~ plurality of style sheets from the server to the receiving station over said the network; ~~receiving said at least one style sheet;~~ and

processing, at the receiving station, ~~said the~~ content data using ~~said the~~ style sheet for output ~~via an~~ by the output device.

119. (new) The method of claim 74, further comprising:

combining the visual and audio information and the processed content data for output by the output device.

120. (new) The method of claim 74, wherein the content data includes a data module that is periodically repeated in the content data.

121. (new) The method of claim 87, further comprising:

combining the visual and audio information and the processed content data for output by the output device.

122. (new) The method of claim 87, wherein the content data includes a data module that is periodically repeated in the content data.

123. (new) The method of claim 88, further comprising:

combining the visual and audio information and the processed content data for output by the output device.

124. (new) The method of claim 88, wherein the content data includes a data module that is periodically repeated in the content data.

125. (new) The apparatus of claim 89, further comprising:

a multiplexor operable to combine the visual and audio information and the processed content data for output by the output device.

126. (new) The apparatus of claim 89, wherein the content data includes a data module that is periodically repeated in the content data.

127. (new) The system of claim 102, wherein said receiving station includes:

a multiplexor operable to combine the visual and audio information and the processed content data for output by the output device.

128. (new) The system of claim 102, wherein the content data includes a data module that is periodically repeated in the content data.

129. (new) The system of claim 103, wherein said receiving station includes:

a multiplexor operable to combine the visual and audio information and the processed content data for output by the output device.

130. (new) The system of claim 103, wherein the content data includes a data module that is periodically repeated in the content data.

131. (new) The recordable medium of claim 104, wherein said method further comprises:

combining the visual and audio information and the processed content data for output by the output device.

132. (new) The recordable medium of claim 104, wherein the content data includes a data module that is periodically repeated in the content data.

133. (new) The recordable medium of claim 117, wherein said method further comprises:

combining the visual and audio information and the processed content data for output by the output device.

134. (new) The recordable medium of claim 117, wherein the content data includes a data module that is periodically repeated in the content data.

135. (new) The recordable medium of claim 118, wherein said method further comprises:

combining the visual and audio information and the processed content data for output by the output device.

136. (new) The recordable medium of claim 118, wherein the content data includes a data module that is periodically repeated in the content data.